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(54) **CELL STRUCTURE OF CMOS**
SEMICONDUCTOR INTEGRATED CIRCUIT AND
DESIGN SYSTEM OF SEMICONDUCTOR
INTEGRATED CIRCUIT

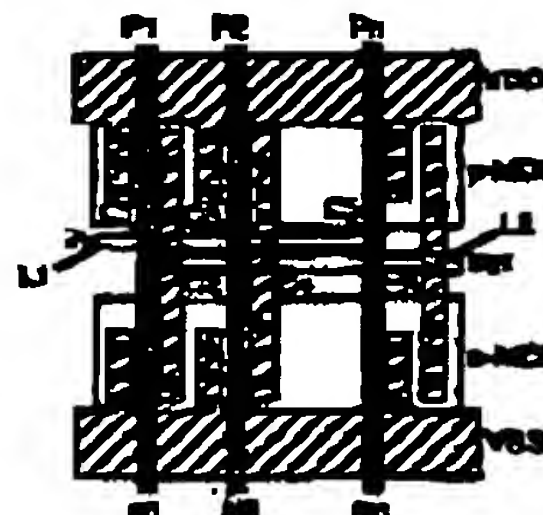
double-power inverter. And if contacts are arranged at
C1-C6, it becomes an n-fold power inverter.

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(57) Abstract

PROBLEM TO BE SOLVED: To change only the driving
force of a cell without changing the arrangement of the
cell and the wiring between the cell terminals.

SOLUTION: (in) is an input terminal of a cell, (out) an
output terminal of the cell, P1-Pn n units of p-MOS Trs
arranged in parallel, and N1-Nn n units of n-MOS Trs
arranged in parallel. P-MOS Trs and n-MOS Trs arranged
in the longitudinal direction in the same lines
constitute CMOS inverters respectively. L1 is wiring
arranged in a cell for connecting the input terminals of
n units of CMOS inverters in parallel mutually, and L2
is wiring for connecting the output terminals in
parallel mutually. Concerning to the fundamental
structure of the cell, any contact is not arranged at
points C1-C6 proposed for arranging contacts. If
contacts are arranged at the points C1, C2 proposed for
contacts, the inverter becomes a mono-power one. If
contacts are arranged at C1-C4, it becomes a



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